

Group D. Laboratory-based Diagnosis of Common Co-Infections, Including Malaria

Levels of Laboratory System: Tests and Services Performed

- Central Laboratory
 - Focus on the following tests:
 - TB
 - Malaria
 - Gram stain
 - Basic bacteriologies and sensitivities, including fungal culture for *Cryptococcus*
 - India Ink (CSF)
 - Stool microscopy
 - Iodine stain
 - Kinyoun stain
 - Trichrome stain
 - Assess current capacity of Central Laboratory (efforts by WHO-AFRO have already begun)
 - Have EQA performed by transnational regional laboratories
- Intermediate and Peripheral Laboratories
 - Focus on the following tests:
 - TB
 - Malaria
 - Have training performed by staff from Central Level Laboratory (train-the-trainer format)
 - Capacity: “laboratory in a box,” including the following:
 - Teaching aids
 - Equipment
 - Reagents
 - Have EQA performed by sending a sampling of slides to the central reference laboratory

First Year Plan

- Develop train-the-trainer package
 - Develop train-the-trainer course
 - Use partner (WHO, CDC, AMREF) or contractor with country input
- Identify national trainers
- Develop a “laboratory-in-a-box” for TB and malaria
 - Use partner (WHO, AMREF, IUATLD, APHL) or contractor
- Develop EQA program
- Review assessments of national reference laboratories with WHO-AFRO, CDC laboratory teams (CDC laboratory GAP contact)
 - Identify current capacity and gaps
 - Focus on capacities in bacteriology, parasitology, and QA oversight

- Develop core materials for national reference laboratory (APHL, WHO)

Second Year+ Plan

- Central Level
 - Develop and implement plan to upgrade capacity
 - Develop and implement transnational EQA program (WHO-AFRO, NHLS program)
- Intermediate and Peripheral Levels
 - Implement training
 - Distribute “laboratory-in-a-box”
 - Implement EQA program
 - Add other tests (e.g., gram stain)